

**REMARKS/ARGUMENTS**

In response to the Office Action mailed May 11, 2010, Applicants respectfully request reconsideration. Claims 1 through 18 and 20 through 32 were previously pending in this application. Claims 1, 6, 12, 20, and 27 have been amended. No new claims have been added and no claims have been canceled. As a result, Claims 1 through 18 and 20 through 32 are pending for examination with Claims 1, 6, 12, 20, and 27 being independent. No new matter has been added. The application is believed to be in condition for allowance.

**A. ALLOWABLE SUBJECT MATTER**

Applicants note with appreciation the indication of allowable subject matter in Claims 22, 23, 29, and 30.

**B. DOUBLE PATENTING REJECTION**

The Office Action rejects Claims 1, 4, and 6 under the judicially-created doctrine of non-statutory obviousness type double patenting as purportedly being unpatentable over Claims 1, 2, and 6 of co-pending U.S. Patent Application No. 10/584,136. Applicants respectfully request that the provisional rejection be held in abeyance until at such a time the claims of the co-pending applications are in fact allowed.

**C. OBJECTIONS TO THE CLAIMS**

The Office Action objects to Claims 1, 20, 21, 27, and 28 for including claim informalities. Specifically, the Office Action objects to the term “OSI.” Independent Claims 1, 20, and 27 have been amended in the manner suggested by the Examiner. Thus, withdrawal of the objection on Claims 1, 20, 21, 27, and 28 is respectfully request.

**D. REJECTIONS UNDER 35 U.S.C. § 112**

The Office Action rejects Claims 1 through 5 under 35 U.S.C. §112(2) as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action asserts the phrase “OSI layer 2 means and OSI layer 1 means,” of Claim 1, is unclear.

Claim 1 has been amended to remove the term “means.” Applicants respectfully assert that the terms “OSI layer 1” and “OSI layer 2” are sufficiently clear and point to at least paragraphs [0010] and [0011] of Applicants’ specification which provides a clear description of the terms. Accordingly, withdrawal of the rejection of Claims 1 through 5 under 35 U.S.C. §112(2) is respectfully requested.

## **E. REJECTIONS UNDER 35 U.S.C. § 102**

The Office Action rejects Claims 20, 21, 26 through 28, 31, and 32 under 35 U.S.C. §102(e) as being anticipated by Billhartz et al., U.S. Patent Application No. 2003/0202476 (Billhartz). Applicants respectfully traverse this rejection.

Amended Claim 20 is directed towards a "... source node predicting [a] future link status ... based on the RREP message, in which the RREP message includes ... at least one parameter describ[ing] a time varying nature of radio channels of links between the nodes ...," wherein the underlined represents what has been added by way of amendment. Support for the amendment to Claim 20 may be found in at least paragraph [0068] of the published U.S. Patent Application No. 2007/0263628. It should be appreciated that independent Claims 1, 6, 12, and 27 have been amended in a similar fashion.

Billhartz is directed towards route determination for multihop routes in a mobile ad hoc network ([0012]). Billhartz describes a preferred use of various QoS parameters (e.g., available bandwidth, error rate, end-to-end delay, end-to-end delay variation, hop count, expected path durability, and priority) which are obtained as a source sends a request in order to discover a route to a destination ([0032]). The request is transmitted to various intermediate nodes, which in turn update the QoS parameters according to *current* conditions or expected delays associated with *traffic flow* ([0042], [0070]).

In contrast, amended Claim 20 is directed towards predicting a future link status based on, in part, at least one parameter describing *a time varying nature of radio channels*. Non-limiting examples of time varying information may include Doppler spread, average fading duration, and/or coherence time.

Nowhere in Billhartz is the prediction of a future link status taught or suggested. Instead, Billhartz teaches estimating an expected delay associated with *traffic flow*. Applicants respectfully assert that one of skill in the art would not equate traffic information with information regarding a time varying nature of radio channels.

Thus, amended Claim 20 is patentably distinct from Billhartz. Claims 21 and 26 depend from amended Claim 20 and therefore are patentably distinct from Billhartz for at least the same reasons.

As should be appreciated from the above discussion relating to amended Claim 20, amended Claim 27 (from which Claims 28, 31, and 32 depend) is also patentably distinct from Billhartz. Specifically, Billhartz fails to teach predicting a *future* link status based on, in part, at least one parameter describing *a time varying nature of radio channels*. Accordingly, withdrawal of this rejection is respectfully requested.

#### **F. REJECTIONS UNDER 35 U.S.C. §103**

The Office Action rejects Claims 1, 5 through 8, 11 through 14, 17, and 18 under 35 U.S.C. §103(a) as being unpatentable over Billhartz in view of Jain

et al., U.S. Patent No. 7,373,543 (Jain). Applicants respectfully traverse this rejection.

Jain is directed towards a method of operating a fault tolerant connection in a network where two copies of a packet are sent to two distinct routes as a precaution of one of the routes including a fault (abstract).

Jain does not remedy the deficiencies of Billhartz, as discussed above in relation to Claims 20 and 27. Specifically, neither Billhartz nor Jain, taken individually or in any combination, teach or suggest “... link status information includ[ing] parameters that describe *a time varying nature of radio channels of links between the nodes ... [and] predicting future link qualities* of links ... based on the updated link status information...,” as is recited in amended Claim 1.

Thus, amended Claim 1 is patentably distinct from the combination of Billhartz and Jain. Claim 5 depends from amended Claim 1 and is therefore patentably distinct from the combination of Billhartz and Jain for at least the same reasons.

As should be appreciated from the discussion relating to amended Claim 1, amended Claim 6 (from which Claims 7, 8, and 11 depend), amended Claim 12 (from which Claims 13, 14, 17, and 18 depend) are also patentably distinct from the combination of Billhartz and Jain for at least the same reasons as amended Claim 1. Accordingly, withdrawal of this rejection is respectfully requested.

**G. CONCLUSION**

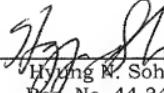
All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

  
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